Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

UNITED STATES DEPARTMENT OF AGRICULTURE

Radio Service

OFFICE OF INFORMATION

LIBRARY RECEIVED SEP 21 1934 U. S. Department of Agriculture

9 N34h

HOUSEKEEPERS' CHAT FRIDAY, September 28, 1934

(FOR BROADCAST USE ONLY)

SUBJECT: "SAVING WAYS OF COOKING AND CANNING." Information from the Bureau of Home Economics, U. S. D. A.

--ooOOoo--

Some ways of cooking save the minerals and vitamins in vegetables. Others waste them. Some ways of canning save these food values. Others waste them. So whether you are serving the last of your garden on the table or putting it into cans for winter, it pays to mind your methods and choose the one that saves.

First, about saving minerals, the mineral salts in vegetables aren't destroyed by heat, but they are soluble in water. So when you cook vegetables in too much water and then discard this cooking water, you're just throwing away valuable food material. Calcium, the important bone-building mineral, and iron, the blood builder, will dissolve in this cooking water and then may be lost down your sink drain. The same is true of other mineral salts found in fresh vegetables. That's why the food specialists advise cooking vegetables in very little water and serving the liquid with them in a sauce or gravy.

In canning, hot-pack your vegetables and most of your fruits, and to save minerals fill the cans with the liquid in which you precooked them. Then when you serve the canned food, serve juice and all.

So much for mineral-saving. Now for saving vitamins. Here the cooking and canning problem is a little more complicated. Of the six vitamins now listed and named A, B, C, and so forth, no two behave exactly alike when they meet a combination of water, heat, and air, as in cooking and canning. Water dissolves some. Heat - that is, long-continued heat - has a bad effect on several. And the oxygen in air destroys others, especially when the food is hot.

Vitamin A, as it happens, isn't seriously affected by the cooking process. But both vitamins B and C are destroyed by heat and oxidation, and are easily dissolved in water. So to save as much of these vitamins as possible the specialists advise short, quick cooking at the boiling point or just below. The rule of cooking vegetables until just tender-no longer, is good for saving vitamins.

Vitamin C is so easily destroyed by cooking, that the experts advise us to make sure of this vitamin by eating some vegetables or fruits raw--every day if possible. In winter this isn't so easy, when we have to depend so largely on canned and stored supplies. But right here we get a lucky break, so to speak. You see, tomatoes, which happen to be the best of all vegetables for vitamin C, will provide it whether raw, cooked or canned.

(over)

Tomatoes, because they contain acid, hold most of their vitamin C during both cooking and canning whereas other vegetables lacking acid, lose the vitamin during these processes. Here acid acts as a vitamin-saver. That's why we hear so much about canning and eating plenty of tomatoes.

So the points to remember about cooking to save vitamins are just these. The two vitamins that come to harm through cooking are B and C. Both suffer from either heat and oxidation, but C suffers the most. So to save these vitamins, cook as short a time as possible at the boiling point or just below. And remember that tomatoes, because of their acid, are the exception when it comes to destruction of vitamin C. Whether they are raw, cooked or canned, they are rich in this vitamin.

Now two points about canning to save food value. First, can fruits and vegetables as soon as possible after you bring them from your garden. If you let them stand around, even in a refrigerator, they lose some of their vitamin value.

Second, use the hot-pack method and work fast. The short precook before you put the food in the cans drives the air out of the tissues. This helps save food values. The air--oxidation, you see- has a bad effect on the vitamins. Also the hot-pack allows for a shorter time for processing either in the water bath or in the steam pressure canner.

Well, as every home-canner knows, fruits and tomatoes are the easiest products to can at home. And they are better sources of vitamin C than the non-acid vegetables. They are easy to can because you can process them safely either in the boiling-water bath or in the oven. But the non-acid vegetables, like corn, peas and beans, must have their processing in a steam pressure cooker for safety. The experts say that this is the only way of getting enough heat to kill the bacteria that may cause their spoilage.

Of course, the best way to be sure of getting the vitamins and minerals you need every day is to eat some fruits and vegetables raw and the rest "quick-cooked", and to use all the vegetable or fruit juice drawn out in cooking.

I think we have just time today to give that good receipt for grape conserve that several of our friends have been asking for. Grape conserve calls for six ingredients:

4 pounds of grapes washed and removed from stems
2 pounds of sugar
1 cup of seedless raisins
1 orange, chopped
1 cup of chopped nut meats
½ teaspoon of salt

Once more. (Repeat.)

Wash, drain and remove the grapes from the stems. Slip off the skins and keep them separate from the pulp. Cook the pulp about 10 minutes--or until the seeds show. Press it through a sieve to remove the seeds. To the strained pulp, add sugar, raisins, chopped orange, and salt. Cook rapidly until the mixture begins to thicken. Stir to prevent sticking. Add grape skins and cook 10 minutes--or until somewhat thick. Stir in the chopped nuts and pour at once into hot, sterilized, jelly glasses. Cover with melted paraffin.